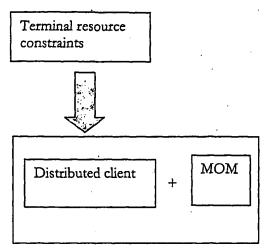
WO 2004/095806

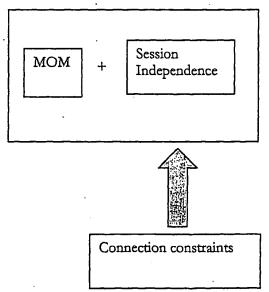
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Terminal resource constraints are met in essence through the combination of a 'distributed client collaborating across a message queuing system, such as a MOM

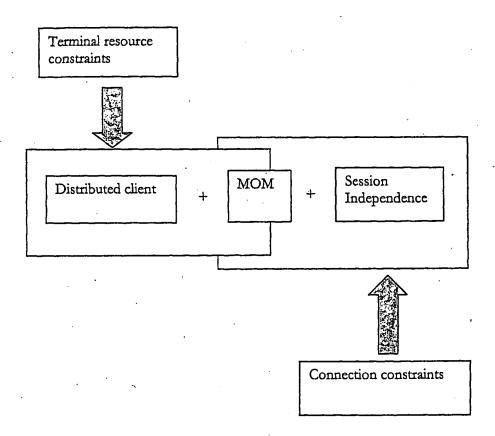
Figure 1



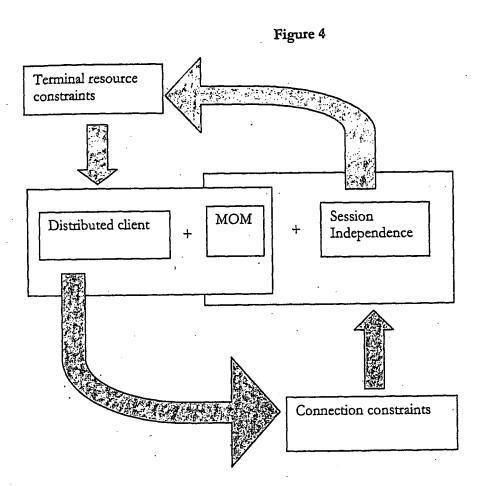
Connection constraints are met in essence through the combination of a message queuing system, such as a MOM, used by a platform operating in a 'session independent' manner

Figure 2

Figure 3



The Transcend Mail and MobileMQ systems address both terminal resource constraint as well as connection constraints



Event based data replication, arising through the distributed client solution, also addresses connection constraints and is inherently session independent.

Imposing session independence enables functions normally delivered in a session dependent manner than is not necessarily suitable for resource constrained devices to be deployed in a manner that is now fit for purpose. These functions include reliability of message delivery, sender authentication, message security, data rate flow control and packet routing.

Figure 5

A Distributed Client' model

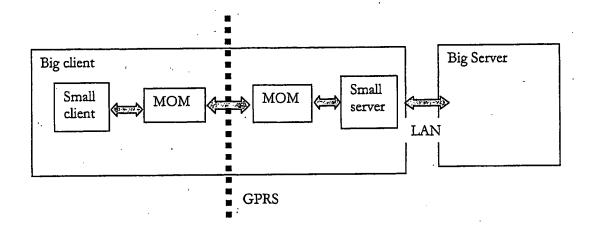


Figure 6

The Small Client can include a terminal-side component, plus the client side MOM; the Small Server can also include a server-side component, plus the server side MOM:

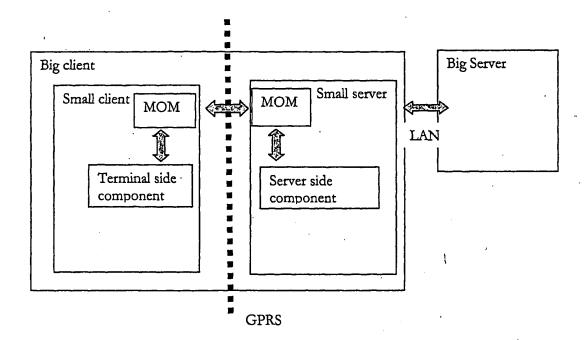


Figure 7

The Small Client can include a program – e.g. an e-mail application, plus plug-in linking it to the terminal-side component.

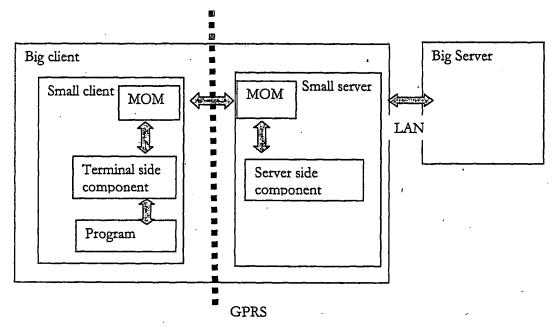


Figure 8

The Small Client can also exclude the program, e.g. a contacts program. The terminal side component then communicates with the contacts program via the contacts database (with event triggers from that database being sent to the terminal side component):

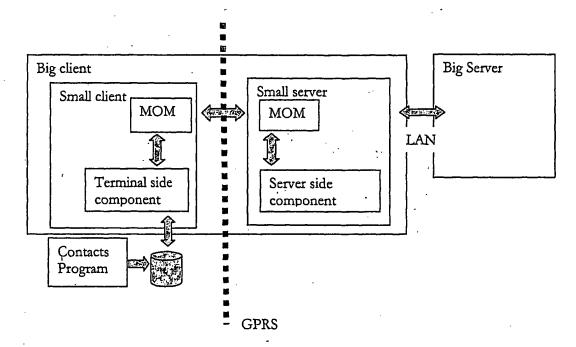


Figure 9

This is conceptually equivalent to the following middleware architecture:

